

REMARKS

Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.111 and in light of the remarks which follow, are respectfully requested.

By the above amendments, new independent claim 34 has been added which is directed to an exemplary method for preserving mushrooms. Support for such new claim can be found throughout the instant specification, for example, at page 3, paragraph [0007], taken in connection with page 18, Tables 1 and 2.

In the Official Action, claims 1, 3-7, 9, 10, 13-20 and 23-33 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent Application Publication No. 2003/0198716 (*Hankinson et al*) in view of U.S. Patent No. 5,912,034 (*Martin et al '034*), or *Martin et al '034* in view of *Hankinson et al*, further in view of U.S. Patent No. 4,814,193 (*Shenouda et al*), U.S. Patent No. 3,328,178 (*Alderton*), Great Britain Patent Document No. 1,510,883, and U.S. Patent No. 1,098,006 (*Allen*), further in view of U.S. Patent No. 6,500,476 (*Martin et al '476*), U.S. Patent No. 5,919,507 (*Beelman et al '507*), U.S. Patent Application Publication No. 2003/0170354 (*Beelman et al '354*), U.S. Patent No. 4,814,192 (*Sapers et al*), U.S. Patent No. 4,011,348 (*Farrier et al*), and U.S. Patent No. 6,159,512 (*Reyes*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

"A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." M.P.E.P. §2141.02(VI) (emphasis in original), citing *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). In the present case, it is respectfully but strenuously submitted that *Hankinson et al* teaches away from the combination with the other applied art alleged by the Patent Office.

Hankinson et al discloses the use of highly basic or acidic treatment solutions.

However, such disclosure is only to criticize and disparage such practice by pointing out the technical problems, risks and disadvantages associated therewith. Specifically, *Hankinson et al* teaches the following: use of such solutions "may be too expensive for commercial implementation and the use of a highly basic solution may be quite dangerous if workers are not sufficiently skilled" (paragraph [0007]); "[t]his technology requires storage and handling of dangerous chemicals, and may be fraught with disposal and environmental issues associated with acidic and basic solutions including as death of beneficial bacterial in leech field and/or settling ponds" (paragraph [0008]); "there is potential for microorganisms on mushrooms to become tolerant to such chemical technology" (paragraph [0008]); "without proper neutralization, residual acidity can result in damaged tissue that is more susceptible to pathogenic degradation." (paragraph [0015]); and "it is possible, and probable that microbes will become resistant to such treatment" (paragraph [0015]).

Thus, while *Hankinson et al* discusses the use of highly basic or acidic treatment solutions, it is only to criticize and disparage such practice by pointing out the technical problems, risks and disadvantages associated therewith. This is further apparent in view of the fact that the processes of *Beelman et al* '507 and *Martin et al* '476 are explicitly mentioned and disparaged by *Hankinson et al*. Clearly, the alleged combination would have been in complete contradiction with the express admonitions and teachings of *Hankinson et al*. In fact, a disclosed objective of *Hankinson et al* is to overcome the very drawbacks and disadvantages associated with the use of highly basic or acidic solutions.

While the Patent Office has indicated that Applicants' remarks filed January 28, 2008 have been fully considered, the outstanding Official Action provides no response in connection with *Hankinson et al*'s teaching away from the proposed combination. In the

previous Official Action dated September 28, 2007, the Examiner stated that "a 'teaching away' urging usually requires that the primary reference would indicate the modification would not work." Official Action at page 4. Contrary to this assertion, however, a disclosure of the inoperability of the proposed modification is not required to show a teaching away. Rather, prior art disclosures which "criticize, discredit, or otherwise discourage" the proposed modification constitute a teaching away. *See, e.g., In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004). Quite clearly, in view of the nature of *Hankinson et al's* disclosure, it would not have been obvious to combine such document with the other applied art in the alleged manner. Doing so would have been in complete contradiction with the express admonitions and teachings of *Hankinson et al*.

Thus, upon a complete and fair reading of the applied art relied on by the Examiner, it is apparent that independent claims 1, 29 and 34 are non-obvious over the applied art.

Furthermore, none of the applied art provides any indication of the **surprising** and **unexpected** results attainable by employing a relatively low-pH first aqueous solution followed by a relatively higher-pH second aqueous solution, in the preservation of mushrooms. In Example 1 set forth at pages 17-21 of Applicants' disclosure, an exemplary process employing a relatively low-pH first aqueous solution followed by a relatively higher-pH second aqueous solution, was compared with a comparative process employing a relatively high-pH first aqueous solution followed by a relatively low-pH second aqueous solution. As can be seen from Tables 3, 4 and 5, the exemplary process yielded superior aerobic plate count, color evaluation and shelf life characteristics in comparison with the comparative process. In the present rejection, the Examiner has relied on various references for disclosing processes employing acid and basic treatments. However, none of such documents recognizes the surprising and unexpected results attainable by employing a

relatively low-pH first aqueous solution followed by a relatively higher-pH second aqueous solution, in the preservation of mushrooms.

Independent claims 1 and 29 are further distinguishable from the applied art. The applied art does not disclose or suggest that the mushrooms are continuously transported through a first treatment area in which step (a) is conducted, and a second treatment area in which step (b) is conducted, as recited in claims 1 and 29. As noted in Applicants' previous response, *Hankinson et al* fails to disclose such continuous transport, and *Martin et al '034* appears to disclose contacting the potatoes with treatment solutions in batch process steps. Concerning such differences, the Examiner has taken the position that "In any case, to make any batch process continuous would have been obvious." Official Action at page 3. Such conclusory statement without provision of some rational, articulated reasoning is improper. "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007), citing *In re Kahn*, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). In the present case, Applicants have discovered that by continuously transporting the mushrooms through the first and second treatment areas in accordance with aspects of the claimed invention, various advantages can be realized such as, for example, improved efficiency of the mushroom preservation process and, notably, **improved and convenient control over the contact time with the first and second aqueous solutions**. Such advantages over the conventional batch process taught by the applied art are substantial, especially when considering the significance of the aqueous solution contact time. *Hankinson et al* and *Martin et al '034* have no disclosure or suggestion of such continuous transport of mushrooms through first and second treatment areas nor the advantages associated therewith.

Independent claim 34 is further distinguishable from the applied art. None of the applied art discloses or suggests the use of a first aqueous solution **consisting essentially of** water, citric acid, calcium chloride, sodium chloride and sodium erythorbate, and a second aqueous solution **consisting essentially of** water, sodium bicarbonate, sodium erythorbate and calcium-disodium EDTA. The applied art fails to provide any recognition or suggestion of the **surprising** and **unexpected** results attainable by use of such first and second aqueous solutions, for example, as shown in the examples set forth at pages 17-29 of Applicants' disclosure.

For at least the above reasons, it is apparent that the claims are non-obvious over the applied art. Accordingly, withdrawal of the above §103(a) rejection is respectfully requested.

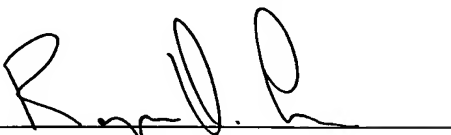
From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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